I will present recent results from the Herschel GT key program entitled Herschel Observations of EXtra Ordinary Sources (HEXOS). In particular, I will focus on results stemming from a "full band analysis" of a complete 1.2 THz wide spectral survey toward the Orion Kleinmann-Low nebula (Orion KL). This massive dataset, obtained using the HIFI instrument, spans a frequency range of 490-1900 GHz and contains approximately 20,000 spectral lines from over 30 molecules. Consequently, we have modeled the molecular emission over an unprecedented range in excitation energy and, in some cases, used thousands of lines to constrain our models. Our collection of molecular fits have: (1) yielded a chemical inventory for different spatial/velocity components toward Orion KL, (2) produced robust abundances for each molecule, (3) provided D/H ratios for some species (e.g. H2O, H2CO, and CH3OH), and (4) allowed us to determine which molecules are emitting in the hottest gas possibly in close proximity to an embedded massive protostar. In addition, detailed modeling of the light hydride H2S points to the presence of a hidden source of luminosity toward the Orion hot core. If time allows, I will also present preliminary results from a similar analysis of the HIFI spectral scan toward Sgr B2 (N), an equally rich spectrum which presents its own unique challenges. This work was undertaken with the aid of the HEXOS Orion KL and Sgr B2 (N) full band analysis teams.